

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-4. (Cancelled)

5. (Previously Presented) A fuel injection equipment for a cylinder injection type and spark ignition type internal combustion engine that injects gasoline directly to a combustion chamber,

wherein the top angle at the point of fuel spray in the pressurized atmosphere of absolute pressure 0.5MPa is from -10° to 10° ,

further comprising a nozzle hole, a valve seat in the upstream side of said nozzle hole, the valve body which opens and shuts the fuel passage by acting on said valve seats, and driving means for said valve body, and further comprising swirl providing means that gives the swirl movement to the fuel in the upstream side of said nozzle hole,

wherein a stage difference is provided in the downstream aperture of said nozzle hole in the direction of the central axis line of the injection valve,

wherein at least one turn-ditch provided to the swirl providing means is a first turn-ditch where the sectional area of the flow path is larger than that of other ditches.

6. (Previously Presented) A fuel injection valve for a cylinder injection type and spark ignition type internal combustion engine that injects ~~gasoline~~ fuel directly to a combustion chamber through a nozzle hole,

wherein the top angle at the point of fuel spray in the pressurized atmosphere of absolute pressure 0.5MPa is from -10°to 10°, ~~wherein~~ a plurality of turn-ditches are arranged around the nozzle hole so as to guide the fuel toward the nozzle hole and to impart swirl movement to the fuel upstream of the nozzle hole.

a predetermined one of the plurality of turn-ditches is larger in flow path sectional area than the remainder thereof and no turn-ditch is arranged ~~[[in]]~~ the ~~opposing~~ opposite side of said ~~first~~ nozzle hole to the predetermined one turn-ditch.

7. (Original) The fuel injection equipment according to claim 5, wherein the height of said first turn-ditch is higher than the height of other ditches.

8. (Original) The fuel injection equipment according to claim 5, wherein the position of the injected fuel spray concentrated part and the position of the step of the nozzle hole opening are provided.

9. (Original) The fuel injection equipment according to claim 5, wherein said step of the nozzle hole opening has the angle of 0° to 30° .

Claims 10-21. (Cancelled)